

NOTES ON THE FLORA OF TAIWAN (4)—

The *Albizia* Durazz. (Leguminosae)⁽¹⁾SHING-FAN HUANG⁽²⁾ and TSENG-CHIENG HUANG⁽³⁾

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Abstract: A taxonomic treatment of the genus *Albizia* in Taiwan is provided in this report. Of the five species of *Albizia*, *A. julibrissine*, *A. kalkora*, *A. procera* and *A. retusa* are native while *A. lebeck* is a cultivated species. *Albizia longepedunculata* is here treated as a synonym of *A. kalkora* for the first time. *Albizia retusa* is reconfirmed as being native.

INTRODUCTION

The genus *Albizia* Durazz. contains about 150 mainly tropical species in both hemispheres (Nielson, 1981). After having consulted abundant literature and herbarium specimens, we recognize five species of *Albizia*, four of which native, for the flora of Taiwan. A taxonomic treatment is given below.

TAXONOMIC TREATMENT

Key to the species of *Albizia*

1. Leaflets more than 15 pairs per pinnule, less than 1.3 cm long...1. *A. julibrissine*
1. Leaflets less than 13 pairs per pinnule, more than 1.5 cm long
 2. Basal veinlets of leaflets 3-4; flowers in 1-3 fascicled globose-head.
 3. Pods yellowish-brown, to 5 cm wide; leaflets more than 3 cm long; petiole-glands at the base of the petiole.....3. *A. lebeck*
 3. Pods dark-brown, to 3 cm wide; leaflets less than 3 cm long; petiole-glands at the middle portion of the petiole.....2. *A. kalkora*
 2. Basal veinlets of leaflets 2; flowers in racemose globose-head
 4. Flowers sessile; filaments white; leaflets ovate to oblong....4. *A. procera*
 4. Flowers pedicellate, the pedicels 3-4 mm long; filaments red; leaflets oblong to obovate.....5. *A. retusa*

1. *Albizia julibrissine* Durazz. in Mag. Tosc. III, 4: 11. 1772; Hayata, Icon. Pl. Form. 3: 87. 1913; Li, Woody Fl. Taiwan 335. 1963; Huang & Ohashi, Fl. Taiwan 3: 164. 1977. 合歡

A tree, up to 12 m high; branchlets glabrous, angular. Leaves with 6-12 pinnae, each with 30-50 leaflets; petiole-glands a little lower at the middle portion of petiole; leaflets obliquely lanceolate, the main vein near to one side of margin,

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0.8-1.3 cm long, 0.2-0.4 cm wide, the base truncate, nearly at right angle. Flowers in racemose globose-head, the filaments light-pink. Pods flat, 5-10 cm long, 1.3-1.5 cm wide.

Iran to China. Taiwan, along river banks at low to medium altitudes, occasionally cultivated.

Ilan: Taipingshan, *Suzuki s.n.* Aug. 1928 (TAI). Taichung: Lishan-Wuling Farm, *Huang 3150* (TAI). Nantou: Ayo-Batakan, *Suzuki 10436* (TAI); Musya-Santinozyo, *Masamune et al. 2449* (TAI). Taitung: Litao-Tienlungchiao, *Yang 2139* (TAI). Hualien: Tienhsiang, *Hsieh & Yang 1520* (TAI); Tailuko, *Hosokawa 5044* (TAI).

2. **Albizia kalkora** (Roxb.) Prain in Journ. Asiat. Soc. Beng. **66**: 511. 1897; Ricker in Journ. Wash. Acad. Sci. **8**: 243. 1918; Anonymous, Fl. Tsinglingensis **1**(3): 2. 1981. 山合歡

Mimosa kalkora Roxb., Hort. Bent. **40**. 1814, *nom. nud.*; Fl. Ind. ed. **2**. 547. 1832.

A. longepedunculata Hayata, Icon. Pl. Form. **9**: 37. 1920 (Isotype, *Hayata & Mori s.n.* 1908 TAI!), *syn. nov.*

A. procera auct. non (Roxb.) Benth.; Li, Woody Fl. Taiwan **335**. 1963, *p. p.*, *incl. fig. 117 (p. p.) & spec. Shimada 4477*; Huang & Ohashi, Fl. Taiwan **3**: 165. 1977, *p. p.*, *incl. pl. 514, figs. 1, 3-7, & spec. Shimada 4477*.

A tree, up to 10 m high; branchlets hairy. Leaves with 4-8 pinnae, each with 12-26 leaflets; petiole-glands at the middle or lower middle portion of petiole; leaflets obliquely oblong, 1.5-2.5 cm long, 0.6-0.8 cm wide, the base truncate, nearly at right angle. Flowers in axillary, 1-3 fascicled globose-head; pedicels 1.5-2 mm long; calyx 5-6 lobed, 2.5-3 mm long; corolla 4-5 lobed, 6-7 mm long; filament white; ovary elliptic, 1.8 mm long. Pods flat, dark-brown, 5-10 cm long, 1.7-2 cm wide.

India, Vietnam, Burma to China. Taiwan, in thickets at low altitude.

China: Kwangtung Prov., Koohow, *Tsiang 2097B* (TAI). Chekiang Prov., Hsienmushan, *Law 1268* (TAI). Kiangsi Prov., Lushan, *Cheo 122* (TAI). Taiwan: Hsinchu, *Shimada 4477* (TAI); Miaoli, Tahu, *Kawakami & Mori s.n.* July 1906 (TAIF).

3. **Albizia lebbeck** (L.) Benth. in Lond. Journ. Bot. **3**: 87. 1844; Kawakami, List Pl. Form. **23**. 1910; Kanehira, Form. Trees **183**. 1917; Liu, Ill. Nat. Intr. Lign. Pl. Taiwan **1**: 491. *pl. 424*. 1960; Huang & Ohashi, Fl. Taiwan **3**: 165. *pl. 513*. 1977. 大葉合歡

Mimosa lebbeck L., Sp. Pl. **516**. 1753.

A tree, up to 10 m high. Leaves with 2-8 pinnae, each with 10-20 leaflets; petiole-glands at the base of the petiole; leaflets obliquely oblong, 3-4.5 cm long, 0.8-1 cm wide, the base truncate, nearly at right angle. Flowers in axillary, 1-3 fascicled globose-head; pedicels about 2 mm long; calyx 5-lobed, 4 mm long; corolla 5-lobed, 7.5 mm long; filaments yellowish-white; ovary oval or elliptic, 1 mm long. Pods flat, 20-30 cm long, 3-4 cm wide.

Native to the tropical Old World. Taiwan, cultivated.

Taipei: Taipei City, *Huang 4119* (TAI). Hsinchu: Shihpachienshan, *Yang 333* (TAI). Tainan: Chiali, *Morimoto 409* (TAI). Pingtung: Kengting, *Chuang 3948* (TAI).

4. *Albizia procera* (Roxb.) Benth. in Lond. Journ. Bot. 3: 89. 1844; Kawakami, List Pl. Form. 24, 1910; Hayata, Mat. Fl. Form. 86. 1911; Kanehira, Form. Trees 84. 1917; Li, Woody Fl. Taiwan 335. 1963, *p. p.*, *excl. fig. 117 (p. p.) & spec. Shimada 4477*; Huang & Ohashi, Fl. Taiwan 3: 165. 1977, *p. p.*, *excl. pl. 514. figs. 1, 3-7, & spec. Shimada 4477.* 黄豆樹

Mimosa procera Roxb., Pl. Corom. 2: 12, *pl. 121.* 1798.

A tree, up to 20 m high. Leaves with 6-10 pinnae, each with 10-20 leaflets; petiole-glands at the base or lower middle portion of the petiole; leaflets obliquely oblong to ovate, 2.5-3 cm long, 1.3-1.5 cm wide, the base obtuse. Flowers in racemose globose-head; pedicels sessile; calyx 5-lobed, 6-7 mm long; filaments white; ovary oval to elliptic, 0.8 mm long. Pods flat, 8-15 cm long, 1.5-2 cm wide.

India to China and southward to Australia. Taiwan, mainly in open and dry places of the southern part.

Taichung: Namakaban-sya, *Sasaki s. n.* Dec. 1923 (TAIF). Tainan: Wushantou, *Huang 1781* (TAI). Kaohsiung: Chiahsien, *Hosokawa 3014* (TAI); Hsiaolin, *Huang 3311* (TAI). Pingtung: Wuweishan, *Sasaki s. n.* May, 1926 (TAI).

5. *Albizia retusa* Benth. in Lond. Journ. Bot. 3: 90. 1844; Henry, List Pl. Form. 39. 1896; Ricker in Journ. Wash. Acad. Sci. 8: 244. 1918; Baker & Bakhuizen, Fl. Java 3: 554. 1968. 鈍葉合歡

A small tree. Leaves with 6-10 pinnae, each with 10-16 leaflets; petiole-glands at the base of the petiole; leaflets obliquely oblong to obovate, 2-2.5 cm long, 0.9-1.5 cm wide, the base obtuse. Flowers in racemose globose-head; pedicels 3-4 mm long; calyx obscurely 5-lobed, about 2 mm long; corolla 5-lobed, 6-7 mm long; filaments red; ovary oblong, 2 mm long. Pods flat, 7-15 cm long, 2-2.5 cm wide.

Java, the Philippines, Ryukyu Islands and Micronesia. Taiwan, in coastal area of the southern tip.

Pingtung; Kengting, *Chiou 11325* (TAI); Hsiangjiaowan, *Pan 99* (TAI), *118* (TAI), *Huang & Huang 13052* (TAI), *13521* (TAI).

This species was first reported by Henry (1896), citing a specimen from South Cape, and was taken up by Ricker (1918). Since then, there was no further collection made in Taiwan. In consequence, Sasaki (1928) and Hosokawa (1936) treated it as a cultivated plant. Recently, some specimens cited above were collected from coastal coral rocks which represent natural habitats. Such observations suggest that this species is indigenous to Taiwan.

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臺灣植物誌之觀察 (4)

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摘 要

本文共處理五種合歡屬 (*Albizia*) 植物，合歡 (*A. julibrissine*)、山合歡 (*A. kalkora*)、大葉合歡 (*A. lebbeck*)、黃豆樹 (*A. procera*)、鈍葉合歡 (*A. retusa*)。其中大葉合歡為栽培種。

本文確認鈍葉合歡為自生種，首次將長梗合歡 (*A. longepedunculata*) 處理為山合歡之同物異名。